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# The JOURNAL of GEOGRAPHY

## A MAGAZINE FOR TEACHERS

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# THE JOURNAL OF GEOGRAPHY

## *A MAGAZINE FOR TEACHERS*

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# When we return from a journey

*what do we prize most highly; what do we dwell upon longest? With what impressions would we part most reluctantly? Are they not those that add to our understanding of other peoples?*

GEOGRAPHY is a journey. It should yield, to every pupil who takes it, increased understanding. The approach to geography, its problems, its maps, its methods, every item of its teaching plan should stimulate the pupil to a sense of the solidarity of the world's interest, and the community of the world's aims. A great many pictures should reveal to him the personality of each country, its customs, habits, and its activities should be shown as the true reflection of its geographic environment.

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The JOURNAL of GEOGRAPHY

VOLUME XXII MARCH, 1923 NUMBER 3

# TEACHING VALUE OF GEOGRAPHIC REGIONS*

MABEL C. STARK
Worcester, Massachusetts

## FUNDAMENTAL REASON FOR REGIONAL GEOGRAPHY

The purpose of this discussion is not primarily to attempt to justify regional geography in general. Its service to students and teachers of geography undoubtedly is appreciated widely. It is essential, however, at the outset to state our fundamental reason for advocating its use, as this notion forms the crux of the ensuing presentation.

The geographer considers the world as a great collection of natural environments, within each of which the possibilities for human occupation depend largely on the physical characteristics of the region. The *people* of the earth *live* in these natural environments and in their activities and customs react largely to the requirements of these environments. It would seem then that a thoughtful study of world regions not only is desirable but well nigh imperative in the geographer's effort to determine the significance of physical environment to man.

## NEED THAT LED TO DEVELOPMENT OF GEOGRAPHIC REGIONS

Various types of regional subdivision long have been used by students and teachers of geography. We recognize the important work done by students of geology, physiography, climatology, ecology, zoögeography, and ethnology in the delineation of world regions based upon criteria determined by their respective fields of study. The regions designated by workers in each of these subjects are very useful to the geographer, but they do not serve his purpose completely. For sometime, therefore, there have been evidences on the part of those interested primarily in geographical studies of a "groping-about" for a more adequate type of regional subdivision.

* Paper presented at the Ann Arbor meeting of the National Council of Geography Teachers, December 26, 1922.

This need has been felt most keenly perhaps by teachers of geography in our endeavor to make adequate geographic interpretations of world areas. As we have tried to help our students acquire the ability to interpret the adjustment of people to the regions wherein they live or are likely to live, we have deplored the ineffectiveness of existing regional divisions. We need, therefore, a type of subdivision that will enable us most satisfactorily to perform the true function of the student and teacher of geography. We believe that *geographic regions* meet this requirement.

## DEFINITION OF GEOGRAPHIC REGIONS AND CRITERIA INVOLVED IN THEIR SELECTION

We purpose to consider a geographic region as a unit thruout which the dominant life responses, present or potential, show a close adjustment to the dominant physical environmental influences. In distinguishing the geographic regions of any continent it is necessary, therefore, (1) to determine the major human activities of the various sections, (2) to determine the dominant influences of the physical environment that make possible these significant human activities, (3) to set aside as geographic regions those areas that show within their boundaries essential uniformity in dominant physical conditions and consequently in dominant life responses.

We believe that thru the use of geographic regions as a basis of study we are able not only to interpret given regions and peoples from a geographic point of view, but also to build up a background for understanding our world net of international relations.

## GEOGRAPHIC REGIONS PUT TO THE TEACHING TEST

Do geographic regions withstand the teaching test? One may assume that the speaker would not be warranted in presenting this topic before this group unless the material under discussion had been subjected to rigid classroom tests.

In the two years and more following the development of this regional notion and its application to the continent of South America, it has been my opportunity either to teach or to have supervision over the geography work in all grades of an elementary school, in normal school and university classes. It follows naturally that rather extensive experimental work in testing geographic regions has been carried on in this living laboratory. The method employed has varied considerably with the need and degree of maturity of the students. My intention now is to outline briefly for three stages of student

ability (1) the aim and general plan of study followed, (2) the reaction of the students to the same, (3) the extent to which a need in geographic study is met thereby.

It was my privilege in the summer of 1921 at the Southern Branch of the University of California to have a class of mature people studying the geography of South America. As the course included but thirty lessons it was necessary to work rapidly and intensively. Since the majority of the group were teachers, my plan was to assist them in acquiring a method of research that later would help them to delineate, justify, and interpret geographic regions of other continents.

A large map of South America showing the geographic regions was placed before them at the beginning of the course. Following a brief discussion of the function of regional geography in general, the significance of geographic regions and the criteria involved in their selection, the various regions of South America were delineated and interpreted briefly along the lines since published in the South America monograph, A few of the more important regions, as the Pampas, the Chilean Valley, and the Sao Paulo Coffee Region, were studied in enough detail to serve as examples of well rounded geographic interpretations such as the students might in turn work out with their pupils in their own classrooms. Care was taken to show the relation each region bears to all others in South America with which it possesses important social and economic relations, as well as to show its association and significance in world affairs.

This was my first opportunity to handle geographic regions with a group of mature students and their favorable reaction toward the notion exceeded my most extravagant hopes. In the parlance of our college boys they simply "ate 'em up," and asked, indeed demanded, that they be furnished maps of the other continents showing such regions. Would that I had been able to grant their request! To test their ability to carry on their own research, the students were asked at the close of the term to lay off, justify, and interpret fully a geographic region somewhere in the world outside of South America and United States. The results were gratifying in that they indicated a good grasp of the idea. The true test unquestionably would be to know how they have taught continental studies since September, 1921. Perhaps my ignorance of this sequel insures my greater professional comfort!

With my normal school students at Salem the most worth-while test of this regional study was carried on with the junior year classes. Geography is a major subject in that year, having four class periods

weekly thruout the year. The earlier part of this course was given over to a study of "Principles of Geography"—a topic to be discussed in more detail tomorrow. It is essential, tho, to state now that this work was based upon regional studies, that the students were led gradually thru their view of climatic regions, topographic types, vegetation zones, and the principles involved therein, into the more complete, more rounded-out notion of *geographic* regions.

The striking difference between the procedure with these normal school juniors and the more mature University of California students lies in the fact that in this situation the concept was evolved with the group, not placed before them in completed form. They were guided in such manner that they came to feel that regional units must qualify under the requirements demanded by the purpose and content of geography, and the necessity for rich and logical interpretation of life in its natural surroundings. The students had the experience of designating such units in their study of North America, selecting a suitable name for the same, and then at once testing out the workability of the scheme, (1) thru their individual and class interpretations of the areas, (2) thru the application of the plan to the problem imminent in their method work—preparing to teach North America or some other continent in the training school.

It may interest and surprise you perhaps to know that at no stage in the development of this material did their instructor use the term *geographic region*. When the psychological moment arrived—after they had selected and studied in some detail such geographic regions as the New England Upland, the Cotton Belt, the Mixed Farming Interior, the Semi-arid Plains—the suggestion was made that they choose an appropriate *group* name for these units—a name that would serve the same end as "climatic regions" used earlier in the course. They were made to feel that it was important that the name suggested for the units really tell the story of the reason for their existence. Again it was highly gratifying that no group ever hesitated or glanced wide of the mark, but presented promptly the obvious best name.

The most conclusive test probably of the teaching value of geographic regions occurred in the fifth grade of the training school in their beginning continental study of North America. We carried on experimental work with the notion to a greater or less extent thruout the intermediate and upper grades, but the most systematic and consistent trial was made in the fifth grade as stated. Several reasons entered into the selection of this grade: (1) we wanted to know how this basis of continental division worked out with young pupils;

(2) the first detailed study of a continent, North America, came in the fifth grade; (3) North America was the only continent, other than South America, for which the complete geographic regional data was in readiness for use; (4) the supervisor of the fifth grade was a woman of considerable teaching experience, with a keen interest in geography, who became so enthusiastic over the possible outcome of the plan that she was eager to give it a thoro trial.

We had many conferences as to the subject matter and method to be used. During that year my schedule was planned to include at least one visit a week to this fifth grade classroom. There I saw Miss Perham give lessons for every possible stage in the interpretation of a given region—introductory, summary, transition lessons, as well as those out of the heart of the material under consideration.

Obviously the approach to and the method of handling these regions with fifth grade pupils differed greatly from the procedure in the situations discussed previously. Boys and girls of this age study the *people* of a given area in their adjustment to their natural setting. They discover how these people make their living and why these particular activities prevail, how their needs and luxuries are supplied, something of their business and social relations with people of other parts of North America and the outside world, something of their customs and culture in so far as these characteristics bear some definite relationship to their natural surroundings. They acquire, for example, a simple, clear understanding of the life of the people in the "Cotton Belt" as conditioned by the "Cotton Belt" physical environment, and their association with other peoples near and far.

The supervisor of this grade stated to me on numerous occasions that she never had secured as effective results in teaching North America to fifth grade children. We were satisfied that by the nature of the plan the relation of the people to the country in which they live is established so naturally and logically that the children arrive at their conclusions by way of a thinking route; that these principles, simply stated but fundamentally scientific, may be applied in their future study in their understanding of strange people and strange regions; that this basis of study makes possible, even in the elementary grades, a *science* of geography.

## SUMMARY

In summarizing the main points, we conclude that *geographic regions* meet an important need for their use enables us:

(1) To perform adequately and logically the function of geography —to determine the significance of physical environment to people.

(2) To make, therefore, effective geographic interpretations of world areas.

(3) To build a background for understanding our domestic associations and our world net of international relations.

(4) To pursue from the elementary grades thru the university a *science* of geography.

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## FACT AND FICTION IN GEOGRAPHY BY NATURAL REGIONS*

R. H. Whitbeck
University of Wisconsin

For some years past certain geographers have from time to time advocated the division of the continents into what they have called natural regions, which regions should become the units of study in geography. This idea of natural regions has been more in evidence in Europe than in America; both French and English geographers have devoted considerable time to efforts in this direction. A large number of maps have been constructed in which the world or parts of it have been divided into so-called natural regions. Mr. Joerg of the American Geographical Society made a study of these maps some years ago and published an excellent paper in Volume IV of the Annals of the Association of American Geographers. In this study Mr. Joerg brought together some twenty regional maps of the United States and of North America, re-drew them on the same projection, and reproduced them as a part of his paper. In this collection of maps Mr. Joerg presents seven maps of North America which are labeled "Natural Regions." Each of these maps was prepared by either a European or an American geographer of recognized standing. Other attempts to divide the continents into natural divisions have been made from time to time and the results have been published. The outstanding fact regarding these maps is their remarkable dissimilarity. It might seem that if trained geographers set themselves to the task of dividing a continent into natural divisions the results of their efforts would be quite similar. The very fact that they are strikingly dissimilar is evidence of the difficulty of the task.

### Meaning of the Term "Natural Region"

In discussions of this subject in Great Britain it has developed that even among English geographers there is little agreement as to

* Paper read at the Ann Arbor meeting of the National Council of Geography Teachers, Dec. 26, 1922.

the method by which these natural regions shall be determined. It seems to be generally agreed that a natural region is one thruout which there is a high degree of physical unity, or as Joerg puts it, "A natural region may be defined as any portion of the earth's surface whose physical conditions are homogeneous."

There seems to be no real difference in the meaning of natural region as conceived of by the various geographers but there is a very wide difference in the weight which they place upon different factors of the natural environment, some placing great stress upon physiography and others upon climate.

## FACTORS TO BE CONSIDERED

Let us see what the natural factors are which must be considered in determining natural regions. Clearly we must consider all of the essential elements which are inherent in the nature of the region and which have a connection with its geography. There are no less than nine important elements to be considered: these are (1) the surface features, or the physiography, which naturally involves a consideration of the geology; (2) the chief mineral resources; (3) the major types of soil; (4) mean annual temperature; (5) annual range of temperature; (6) length of growing season; (7) mean annual rainfall; (8) monthly or seasonal distribution of rainfall; (9) native vegetation, which is, of course, a result of all the foregoing factors. A tenth might be added, namely, the native fauna, altho this seems unimportant.

## CAUSE OF THE WIDE DIFFERENCES IN MAPS

Those who have attempted to make maps showing natural regions have reached conspicuously diverse results because each has attached different weight to the various factors which had to be considered in delimiting the natural regions. The fact is that thermal regions, which are so important, do not at all coincide with physiographic regions which are also highly important; nor do rainfall regions coincide at all with thermal regions; nor do any of them coincide with regions of great mineral wealth. These various natural regions cut across one another in every possible direction, and any effort to bring them all into harmony is impossible; it must result in ignoring or largely ignoring several considerations and considering only one or two of the possible eight or ten factors in the problem. The drawing of natural regions therefore is based partly upon facts in nature, but will be dominated by the training, special bent, and particular interests of the man who makes the map. If his interests are largely physiographic

his map will reflect that leaning, in that it will stress physiographic elements and will minimize others. If the man is a climatologist, his interest will be reflected in his map. If he is an agricultural geographer a still different map will be produced, and so on. This is inevitable because no usable map can be made which takes into account all of the eight or ten geographical factors that must be considered if a map of real natural regions is to be made. Necessarily in the drawing of each region some one or two of these factors must be made predominant and other factors must be largely ignored. Right here, then, is the cause of disagreement. Men do not think alike as to what particular factors shall be given predominance in a particular region.

## DIVISION OF THE UNITED STATES INTO PHYSIOGRAPHIC PROVINCES

Several years ago the Association of American Geographers and the United States Geological Survey selected a committee of experts and set them at the task of dividing the United States into physiographic provinces. Note that this committee had only one country to consider, namely the United States, and only one element, namely, physiography. The committee was not attempting to divide the United States into natural regions. Rainfall, soil, temperature, length of growing season, natural vegetation, were ignored. Professor Fenneman, the Chairman, in reporting upon the labors of the committee says that the committee met three or four half days a week for four months before they were able to produce the map.[1] These men were among the most competent that could be secured. They had wide personal knowledge of the physiography of the United States. They had all the resources of the United States Geological Survey at their command. Yet it took them months to reach an agreement in the making of a map which was concerned with only one element—the physiography of one country. If it was thus so difficult to produce a map of the physiographic regions of the United States, what would be the outcome if an equally competent committee attempted to make a map which involved not one but nine or ten different considerations including soil, rainfall, temperature, mineral resources, and the rest?[2]

[1] Annals of the Association of American Geographers, 6:21, 1916.

[2] A recently-appointed committee of the Association of American Geographers will attempt to produce a map showing the "Geographical Regions" of the United States.

### ATTEMPTS TO CONSTRUCT MAPS OF NATURAL REGIONS NOT USELESS

Does this mean that the effort to divide the world into natural regions should be abandoned? Not necessarily. I know of no reason why Professor A, or Professor B, or Professor C should not make and publish his conception of the world or any part of it divided into natural regions providing he labels it "Natural Regions as Conceived of by Professor A, or Professor B." But in making this map he should tell us what considerations have been uppermost in his mind in delimiting the various regions. He should make no claim that this map is anything more than his particular view at a particular time.

### RELATION OF THE PROBLEM TO ELEMENTARY GEOGRAPHY

Thus far I have had in mind almost wholly the making of maps by expert geographers for use by expert geographers, not maps to be used in the elementary or secondary schools. This introduces a different consideration. Trained geographers know that any map of natural regions that can be made is some particular man's map or some particular committee's map, and these geographers know that such maps are compromises, and that they reflect the personal leanings of the maker. The trained geographer accepts these maps for what they are, but the untrained teacher in the elementary or secondary schools, and still more the pupils of these schools do not look upon published maps in this way. They regard them as authoritative products. The pupils easily gain the impression that the boundaries of these natural regions are quite as exact as the boundaries of the states. Now, everyone who has worked long in this field knows that regions of this sort can seldom be accurately delimited; and that within a given region there may be a considerable degree of unity *in certain particulars*, but great diversity in many other particulars. The unity within a region may be a physiographic unity, or it may be a rainfall unity, or it may be temperature unity, but it can not possibly be a unity in all these particulars unless the natural region is very small.

### PHYSIOGRAPHIC UNITY NO GUARANTEE OF UNITY IN OTHER PARTICULARS

Let us take an example. One of the so-called natural regions of the United States is the Appalachian or Allegheny plateau, forming the western portion of the Appalachian highland extending from the Catskill mountains in the north to Alabama in the south, nearly a

thousand miles. It is a physiographic unit in that its structure and relief features are quite similar thruout, but there the unity ends. In most other particulars the region is exceedingly diverse. The northern end is in a region with a short growing season, cold winters, and heavy snows. The southern end of the region is in the cotton belt. The region therefore does not possess climatic unity. The northern end of the region contains the Catskill Mountains which have no coal, no cities of any importance, no manufacturing worth mentioning, relatively backward agriculture, and a sparse population. Passing a hundred miles westward brings one into the hill-and-valley region of southern New York with fair-sized cities like Binghamton and Elmira, a fairly prosperous farming and dairying region, but without coal or oil. Pass farther to the southwest and we are in the petroleum fields of western Pennsylvania in which region for fifty years the production of petroleum was the dominant activity. The whole economic life of the region centered around oil and gas, but there is little manufacturing. Passing a little farther south we come into the Pittsburgh district, a region of enormous wealth of coal of coking quality, enormous industrial activity, especially in the smelting of iron and the manufacturing of steel products; a region of many cities, dense population, and great wealth. Passing still farther south into central West Virginia we reach a region where coal mining and the production of oil and gas and lumber are prominent industries, but where there is little manufacturing. Still farther south we come into the mountains of eastern Kentucky, the home of the mountain whites, one of the most isolated portions of our country, a region without cities, without manufacturing, with but little mining, a region of exceedingly backward people, poor transportation, sparse population, unprofitable agriculture—in fact, one of the most secluded and unfrequented parts of our eastern states, This region again differs in every particular except physiography from the Pittsburgh district or the farming district of southern New York. Passing still farther south we come into the cotton belt of Alabama.

How can we possibly teach students that this belt possesses geographical unity or that it is geographically homogeneous? How can we teach them that human response to geographical environment in this belt is esssentially similar when the facts are that it is most pronouncedly dissimilar? The dissimilarity between various parts of this Appalachian Plateau are as great as the dissimilarity between this region and parts of Australia or New Zealand on the opposite side of the earth.

## MANY KINDS OF REGION-MAPS NEEDED

Does this mean, then, that we must abandon our dream of dividing the continents into natural provinces? Does this mean that only political divisions are to be considered as units of study in geography? Not at all. What we need is accurate rainfall maps based upon records and measurements, soil maps based upon actual surveys, vegetation maps based upon field investigations, maps showing the length of the growing season based upon actual records, and so thruout the list.

## NATURAL REGIONS WITHOUT DEFINITE BOUNDARIES

Must we ignore such regions as the Coastal Plain, the Appalachian Highland, the Central Plains, the Rocky Mountain Highland, and others? By no means. The Coastal Plain is a physical region, but the human response within that region is diverse. Soil conditions, temperature, the length of the growing season, differ materially in different parts of the belt. It is a region with unity in certain respects. It is not homogeneous, nor is the economic life uniform thruout the plain. The Appalachian Highland is also a physical region. It exists in reality. There is no reason that I know of why we should not refer to it as a physical province or even as a geographical region. The region is a natural unit in certain particulars, but these are outstanding, conspicuous, and important particulars. In my judgment it might be better in the case of maps for elementary schools if we could avoid drawing actual, definite boundaries for these provinces. On a relief map of the United States we can mark the proper regions "The Coastal Plain," "The Appalachian Highlands," the "Central Plains," etc., without setting them off by definite boundaries which in many cases can not be drawn accurately, neither do I believe that it is necessary to have these regions all separate and distinct from one another, for in nature there is overlapping. The corn belt overlaps the wheat belt, the agricultural Central Plains are overlapped by the industrial region which has worked inward from the East. The coal and oil regions overlap indiscriminately the various other physical regions. In nature there is endless overlapping, criss-crossing, and interpenetrating of regions into other regions. If man attempts to draw definite boundaries for nature he attempts to do in most cases what nature has not done, and he therefore introduces fiction to a greater or lesser degree.

## POLITICAL UNITS ARE ALSO GEOGRAPHICAL REGIONS

There is one other consideration that must not be lost sight of. A political unit may be a geographical unit as truly as is a physical

one. France is just as real a geographical entity as is the North European Plain or any other physical area. Germany is a geographical unit, tho it is bounded by political boundaries. Political boundaries are parts of geography; they may change from time to time, but that does not prevent their being very real factors in geography. We have physical geography and human geography, physical boundaries and political boundaries. In physical geography we study plains, plateaus, rivers and glaciers as natural objects; in human geography we study countries, cities, industries and productions; and to most people the latter are no less real or interesting than the former.

Tremendous differences may exist on two sides of a political boundary; take, for example, that of Mexico and the United States. After one passes across the boundary from the United States into Mexico he is still in the same physical or natural region; he has crossed only an artificial or political boundary, but that boundary is of utmost significance. On one side of it there is established and stable government with protection to life and property, schools for all the people, compulsory education, reasonably honest elections, revolutions almost unknown, all kinds of internal improvements going on, the work habit prevalent, a tendency to accumulate property, to have one's children educated, and, on the whole, respect for law and order. On the other side of the line we find almost the opposite in all these particulars. I do not know of any boundary between natural regions of the United States which has anything like the significance of the political boundary between the United States and Mexico. There is for example relatively little difference between the *physical* geography of the islands of Haiti and Porto Rico, but in every other respect they differ almost as much as day and night. This does not mean that every small country and still less every individual state of the Union should be a separate unit of study. It is not necessary in western South America, for instance, to study each country separately, inasmuch as the Andean countries north of Chile have so much in common. It is not necessary to study each of the Balkan states or each of the new Baltic states as separate countries, but several can be grouped together and studied as a group. In other cases, however, political boundaries are of utmost importance. Switzerland, as a political unit, at the present time is so utterly unlike its neighbor Austria across the boundary that the mere fact that they are in the same physical region has little importance. The political factor there is far more important than the physical. My plea is for a recognition of all the influential elements, human as well as physical, *that belong to geography.*

## "GEOGRAPHICAL" REGIONS BETTER THAN "NATURAL" REGIONS

I believe the term "Geographical Regions" is better than "Natural Regions." I believe that for the elementary school and high school the recognition of geographical regions, in which human activities as well as natural features are considered, is better than dealing with so-called natural regions in which anthropogeography is ignored. In an old region like Europe where countries such as Spain, France, British Isles, Germany, Norway-Sweden, Denmark, and Switzerland, have existed as political units for hundreds of years, have developed their own national life, their own intense national feeling, their own distinctive character, and have worked out their economic life in their own particular way, political units have far more meaning than natural regions. Holland may be only a small piece of the North European Plain set off by no natural boundaries but to the people who read history and still more to the people of Holland, that little piece of the North European Plain is a very real unit. In some parts of the world—for example, parts of South America, of Africa, of south-eastern Europe—political units are less distinctive and the political boundaries signify relatively little.

## CONCLUSION

I have tried to set forth the following points:—

1. In the delimiting of so-called "natural regions" a large number of different geographical factors must be taken into account.

2. Physiographic, climatic, mineral, soil and vegetation regions cut across one another in every direction, making it impossible to delimit natural regions which shall possess physical unity in all or even in several particulars, unless exceedingly small regions are made.

3. Maps showing the division of a continent into "natural regions" will of necessity differ widely according to the personal interest of the man who makes them. They are his particular brand of natural regions.

4. In almost any large physical region such as the Appalachian Plateau or the Central Plains of the United States there is greater *geographical* diversity than unity, for geography deals with man's reaction to his geographical environment as well as with physical features of the environment.

5. We need special and dependable maps of physical regions, such as temperature maps, soil maps, rainfall maps, forest maps, and mineral resource maps, but a map that attempts to combine all of these in one

can be of little value. Maps must be made for certain special purposes and they should be adapted definitely to these purposes.

6. Natural or geographical regions, such as the Appalachian Highlands or the Central Plain, can be fully recognized and named on the map even tho no definite lines for boundaries are drawn.

7. "Geographical Regions" seem preferable to "Natural Regions" as teaching units, in that they take account of man's response as well as his physical environment.

8. Natural boundaries between regions are often of less significance than are political boundaries, and long established political units like France, Italy, or Germany are more meaningful geographical regions than any physical regions are.

## REFERENCES

Charles R. Dryer, Regional Geography. *Jour. Geog.*, Nov., 1912, 11:73–75; also High School Geography, American Book Co., 1911.

N. M. Fenneman, Physiographic Boundaries Within the United States. Annals Assoc. Am. Geog., 4:84–134, 1914, 3 maps.

————Physiographic Divisions of the United States. Annals Assoc. Am. Geog., 6:19–98, 1916. Report of committee. Map.

A. J. Herbertson, Major Natural Regions. *Geographical Journal* (London), 25:300–312, 1905.

————Thermal Regions of the World, *Geog. Jour.*, 40:518–532, 1912, 8 maps. Discussion of paper by five other geographers.

Wolfgang L. G. Joerg, The Subdivision of North America into Natural Regions: a Preliminary Inquiry. Annals Assoc. Am. Geog., 4:55–83, 1914, 22 maps.

P. M. Roxby, What is a Natural Region? *Geographical Teacher* (England), 4:123–128, 1907–8.

J. F. Unstead, A Synthetic Method of Determining Geographical Regions. *Geog. Jour.*, 48:230–249, 1916. With discussion by J. W. Evans, L. W. Lyde, P. M. Roxby, B. C. Wallis, E. J. Oxford, and H. O. Beckit.

# A CROSS SECTION OF CENTRAL AMERICA IN COSTA RICA

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Costa Rica is one of the Central American countries which is crossed by a railroad from ocean to ocean.

Port Limon is the terminus on the Caribbean side. Along the shore, north and south of the port, is the sweeping curve of a beach bordered by a fringe of cocoanut palms. Back of the beach is a coastal plain several miles wide. Several rivers cross the plain, and their valley lowlands form extensions of the plain back into the mountains.

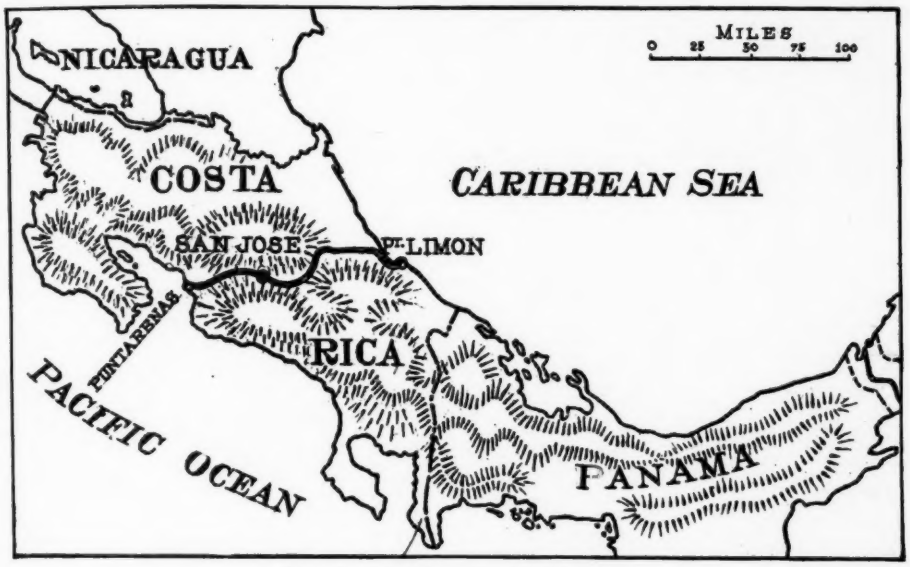


FIG. 1. Sketch map of Costa Rica

This coastal region is hot and rainy thruout the year. Rain forest is the natural type of vegetation. Plants spring up in profusion wherever there is space to compete with each other for light. The edge of the forest is almost impenetrable, but within it the dense stand of tall trees and climbing vines shades the ground to such an extent that there is very little undergrowth and walking is easy. The aspect is not greatly unlike that of the hardwood forests of the United States in their primeval state.

This lowland is the seat of a great agricultural enterprise. Conditions are ideal for banana production, but the control of the natural vegetation is so difficult and problems of health and transportation

are so great that individual settlers are helpless, and the district remained a wilderness until a full grown organization stepped in, ready to face all the problems at once. In recent years the rain forest on the plains has been replaced by banana farms, with thousands of acres

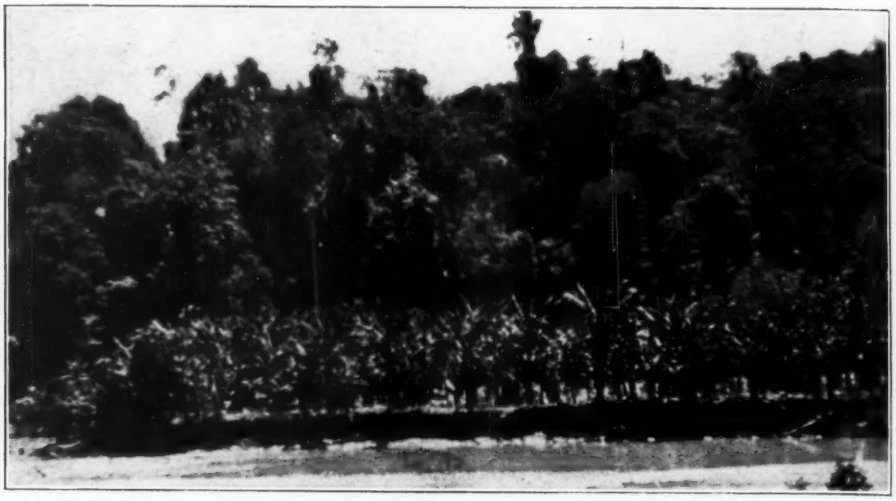

FIG. 2. Caribbean coastal region showing bananas in foreground and rain forest in background

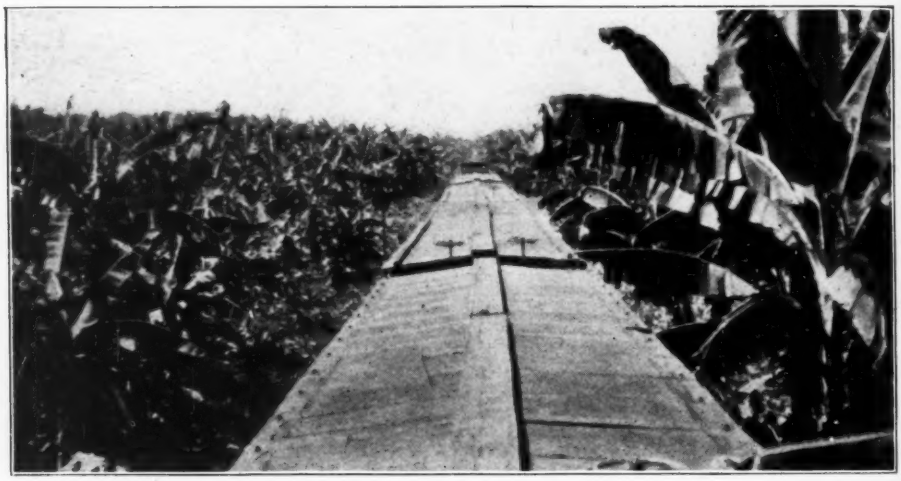

FIG. 3. A banana farm in the Caribbean coastal region

of tall, broad-leaved plants, and with numerous groups of wooden buildings and a close network of railways. On some older land bananas have declined on account of soil deterioration and have been succeeded by other crops, particularly cacao, groves of little trees

growing beneath tall shade trees and bearing cucumber-like pods on their trunks.

The inhabitants of the district are English speaking Negroes, brought in from the West Indies as laborers, and white men from the United States who act as overseers.

West from the coastal plain the main railway line follows one of the river valleys up into the mountains. The river is swift, the valley is narrow, and the slopes are covered with dense rain forest.

After several hours of climbing the train reaches a more open upper valley and finally emerges on the floor of a broad basin. This is the plateau, an undulating upland, above which rise the smooth green slopes of cloud-capped volcanoes. There are scattered trees, pastures bordered by stone walls, fields of corn and potatoes that look much

FIG. 4. A view on the plateau region

like those of New England in summer. The climate of this plateau is mild thruout the year, and there are dry and rainy seasons. Coffee is the chief crop of the district. There are numerous groves, large and small, in which coffee bushes are grown in the shade of larger trees. Here and there are cement floors and tanks for the cleaning and drying of the coffee beans. The farm houses, have plastered walls and tiled roofs, instead of wooden walls and zinc roofs as on the coastal plain. There are many small farms instead of large plantations, and the inhabitants are Spanish speaking white people instead of English speaking Negroes. In the midst of the valley is a beautiful white capital city, San Jose, and there are other substantial towns. This plateau district of which San José is the metropolis, is a populous and productive area.

The way to the West from the plateau is thru a deep gorge down the banks of which the railroad descends to the Pacific. In the descent the landscape changes to semi-arid country, hot, desolate, and sparsely

FIG. 5. A coffee grove on the plateau region showing the coffee bushes below shade trees

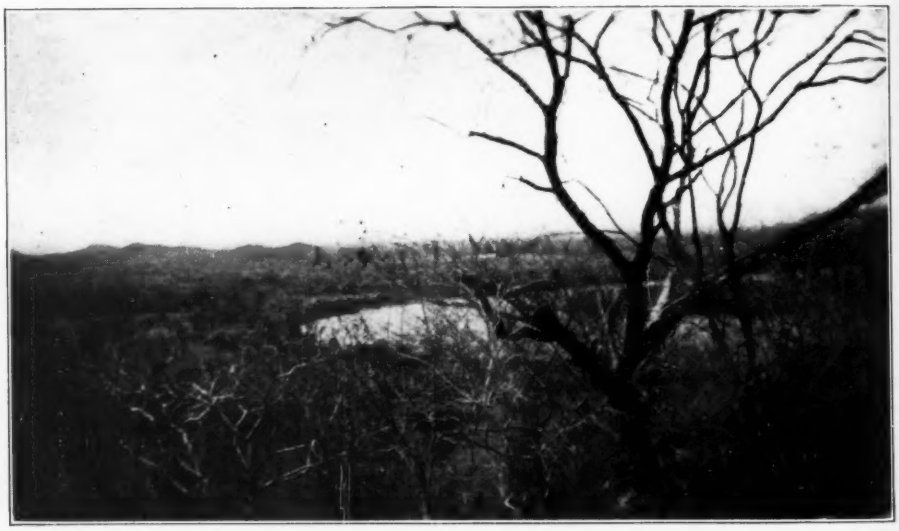

FIG. 6. Pacific coastal region showing a valley in the dry season

populated. The Pacific coast terminus of the railroad is Punta Arenas, "Sandy Point." Along the coast temperature is high thruout the year, and there is a short rainy season and a long dry season. Moun-

tain spurs reach to the coast in many places and the coastal lowlands are narrow and interrupted.

The general aspect of the coast is like that of southern California. Thorn forest is the natural vegetation, a scrubby, tangled growth more difficult to penetrate than the rain forest of the Caribbean coast. In it there are some trees of commercial value, particularly log-wood and other sorts of dyewood. Back from the coast in some places there are moister valleys and rolling foothill lands, where the forests contain mahogany and cedar trees. In such places cleared land affords good pasturage for cattle, and crops of corn and upland rice can be raised. Here there are settlers raising cattle and developing pioneer farms.

FIG. 7. A pioneer's house in the Pacific coastal region

The Pacific coast is like the Caribbean coast in being a new country, but unlike it in other respects. The great resources of the Caribbean can be utilized only by a great organization. The lesser resources of the Pacific can be utilized with much less difficulty and therefore are available for individuals with little capital, making a living in a small way, and becoming gradually more prosperous as the district develops.

The major physical features of Costa Rica extend thruout the length of Central America; rainy forested lowlands on the Caribbean side, dry slopes on the Pacific side, a central backbone of mountains and high intermontane valleys or plateaus. Each country except

Salvador extends across the continent and has a share in all three features.

Political boundaries thus unite places which are very different in environment, and separate places which are very similar. This division is not due to political plans nor to historical accidents but is a natural development.

In the length of Central America there are a number of districts which are especially favorable for human settlement, on account of their resources and their healthful climate. One of these districts is the central plateau of Costa Rica. The others are the more or less similar districts in the other Central American countries, all separated from each other by relatively unattractive, rugged, arid, or inaccessible country. Spanish settlers naturally occupied these favorable districts first and in largest numbers, mingling with the Indians who had already selected these desirable places. Each of these centers of population became a center of influence for the surrounding sparsely inhabited territory. Each had communication with the outside world by means of an outlet on the Pacific coast. The Caribbean coast remained a wilderness, the various parts of which, for want of better claimants, belonged to the nearest inhabited districts.

When Central America became independent, it naturally separated into separate countries, the nucleii of which were communities that always had been separate. Even now communication between Central American countries is not by land but by sea. It is only recently that boundary disputes have become prominent, for the boundaries generally have been in unoccupied and even in many cases unexplored territory.

At some future time many of the unsettled areas doubtless will be occupied and land transportation between the chief centers of population established. When this occurs, a Central American union may become a reality.

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## A SEVENTH GRADE PROBLEM STUDY OF CZECHOSLOVAKIA

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### MAJOR PROBLEM

Is it likely that Czechoslovakia will survive as an independent nation?

### MINOR PROBLEMS

1. Are its area and population great enough to justify independence?
2. Does the character of the population justify independence?
3. Are its natural resources large enough to justify independence?
4. Are the natural resources well developed?
5. To what extent is it self-sustaining?
6. Is it in a favorable position for trade with other countries?
7. Is there racial unity among the population?
8. Is there likelihood of attack from without?
9. Could the country be defended easily and effectively in case of attack?

### FACTS THAT WILL HELP TO SOLVE THE PROBLEMS

Of the twenty-five European countries (not counting city-states and tiny divisions like Luxemburg, Monacco, etc.) Czechoslovakia with its 54,000 square miles and 13,000,000 people ranks twelfth in area and eighth in population. Both Czechs and Slovaks are noted for their patriotism, courage, industry, and thrift. The Czechs are a highly cultured race, there being only 2.5 per cent of illiteracy among them. Unfortunately the Slovaks are less cultured, there being 25 per cent of illiteracy among them because their Hungarian rulers failed to establish enough elementary schools in Slovakia. But it seems that illiteracy will be stamped out in a generation or two, for in the first year of independence 2,700 elementary schools were established. The Slovaks have had practically no experience in government, and thus the local governments in Slovakia will suffer for some years to come for lack of suitable administrators.

The presence of four million Germans, three-fourths of a million Magyars, and almost half a million Ruthenians, together with the lack of perfect unity between Czechs and Slovaks is unfortunate for the country. The fact that the waterways and railways of Slovakia lead south into Hungary, while the more important ones of Bohemia lead north to Germany or southeast to Vienna complicates the problem of securing unity between the two larger divisions of the country and is unfortunate from the standpoint of national defense. There are no important east-west lines of communication to bind together Bohemia, Moravia, Slovakia, and Ruthenia.

One-half of the country is arable and one-third is in forests. Forty-one per cent of the population is engaged in agriculture, almost 20 per cent in industries, and about 4 per cent in lumbering and in wood

using industries. Statistics for the more important crops and domestic animals show a highly developed agriculture, particularly in Bohemia where 90 per cent of the land is said to be agriculturally productive.

CROPS AND LIVESTOCK OF CZECHOSLOVAKIA IN 1921

| *Crops and Livestock* | *Acreage* | *Production* | *Yield per acre* |
|---|---|---|---|
| | | Bushels | Bushels |
| Rye | 2,093,000 | 54,000,000 | 25 |
| Oats | 2,002,000 | 72,000,000 | 36 |
| Barley | 1,581,000 | 47,000,000 | 29 |
| Wheat | 1,537,000 | 40,000,000 | 26 |
| Potatoes | 1,516,000 | 136,000,000 | 90 |
| Corn | 365,000 | 10,000,000 | 28 |
| Flax seed | 59,000 | 313,000 | .. |
| | | Pounds | |
| Flax fibre | ..... | 28,000,000 | .. |
| Maslin | 43,000 | 55,803,000 | 22 |
| | | | Pounds |
| Hemp | 28,000 | 7,510,000 | 268 |
| Hops | 20,000 | 5,530,000 | 268 |
| Sugar beets | 539,000 | 770,000* | ... |
| | | Number | |
| Cattle | | 4,200,000 | |
| Swin | | 2,000,000 | |
| Goats | | 1,174,000 | |
| Sheep | | 976,000 | |
| Horses | | 581,000 | |

*Tons of sugar.

Czechoslovakia has almost 90 per cent of the soft coal of the former Austria and 60 per cent of the iron ore. In 1913 Bohemia produced 2 per cent of all the coal mined in the world. Seven million tons of coal were exported in 1921.

The manufacturing industries may be divided into three classes: industries which obtain all their raw material at home, industries that obtain part of their raw material at home, and those wholly dependent on foreign raw materials. To the first group belong the sugar, malt, lumber, glass, ceramic, and porcelain industries. The metallurgical, chemical, and leather industries belong to the second group. The textile industry, including the cotton, woolen, and flax industries belong to the third group.

Not only raw materials but certain foodstuffs and beverages must be imported. Among the imports for 1921 are considerable quantities

of fats, beverages, kitchen salt, mineral oils, fruits and vegetables, tropical fruits, colonial produce, grain, malt, legumes, and dairy products.

The lack of a sea coast hinders oceanic trade somewhat in spite of the rights of navigation of the Elbe and Danube and the privilege of making installations in Hamburg and other German ports and of enjoying special privileges there. It remains to be seen how long these concessions granted by Germany at Versailles will be respected. Already Czechoslovakia realizes that its best opportunity for export markets is in the Balkan region and in Russia, and during 1921 special pains were taken to establish permanent commercial relations with the Balkan States. The Czechoslovak government has founded a permanent exhibit of commercial products at Sofia.

Czechoslovakia is surrounded by unfriendly powers. Its territory belonged formerly to Germany, Austria, and Hungary, each of which probably waits impatiently for the day when lost possessions may be regained. There was conflict with Poland over the Teschen coal mines. But it is hoped that the kinship of race between Poles and Czechs and Slovaks will outweight trifling causes of difference. Bowman says, "An important source of anxiety to the Allies is the degree to which Czechoslovakia may form political or economic relations with Russia.—A Czech leader, Kramer, stated (1920) that the war could not be said to be over until the Russian question had been settled, that the Czechs should remember that they also were Slavs, and that they should remain faithful to Russia so that Russia might not have to seek alliance with Germany."

The frontiers of Bohemia are strategic ones, but racial unity has been sacrificed to obtain them, for a ring of German population occupies the borderlands of Bohemia. Mountains form a rather easily defended boundary on the north of Slovakia, but there are no natural defenses on the south. The form of the country which is 500 miles from northwest to southeast and only 50 miles from north to south in Slovakia causes the problem of national defense to assume a grave aspect. The fact that the Slovaks make up only 60 per cent of the population of Slovakia is another cause for concern.

REFERENCES

1. Bowman, The New World.
2. U. S. Dept. of Commerce, Supplement to Commerce Reports, Trade and Economic Review for 1921. No. 14, Czechoslovakia.
3. Finch and Baker, Geography of the World's Agriculture.
4. United States Geological Survey, World Atlas of Commercial Geology.
5. The *National Geographic Magazine* for Feb., 1917 and for Feb., 1921.
6. Maps and tables from the pupils' geography text.

# A GEOGRAPHY VOCABULARY STUDY

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The purpose of the investigation was to determine the nature of the vocabulary used in our present day geography texts; to find out to what extent this vocabulary differed from the ordinary and try to make comparisons and draw conclusions that would account for the difficulty of geography to some pupils.

McMurry and Parkins Elementary School Geography, 1921, is the text upon which the results are based. It was the original intention to tabulate the frequency of every word in the geography but this proved to be too time consuming. After fifteen pages had been cared for in the above way the procedure was changed to the tabulation of only those words of geographical character. Some words presented themselves as distinctly geographical while others were selected arbitrarily. In the selection of the geographical words the investigation received the advice of Dr. Buckingham and Mr. Stevenson under whose direction the problem was carried. The tabulation was done on 3x5 cards. The word was written in the upper left hand corner of the card and the frequency marks were placed after the word and across the top of the card. This method was found very convenient as the loose cards could be shuffled and rearranged as the investigation progressed.

In the marking of the words of geographical nature the geography was read thru and the words marked at three different times, one person reading thru the geography twice and marking the words each time and another reading and marking once. The words marked were kept in two separate lists for comparative purposes, one containing the proper nouns and the other the common nouns, verbs and remaining words of geographical character. The list of proper nouns showed 859 different words while the other showed 1,022.

The following is taken from the list of common nouns and will give one an idea as to the nature of the findings.

TABLE I

ALL WORDS WITH A FREQUENCY OF FIFTY OR MORE

| *word* | *f.* | *T. r.* | *word* | *f.* | *T. r.* |
|---|---|---|---|---|---|
| city | 466 | 1a2 | valley | 81 | 1b |
| country | 438 | 1a3 | iron | 79 | 1b |
| state | 365 | 1a3 | rain | 79 | 1a5 |
| river | 306 | 1a3 | harbor | 78 | 2b |
| water | 278 | 1a2 | transportation | 77 | 4b |

TABLE I (continued)

| *word* | *f.* | *T. r.* | *word* | *f.* | *T. r.* |
|---|---|---|---|---|---|
| people | 273 | 1a2 | wheat | 77 | 1b |
| south | 266 | 1a5 | port | 73 | 2a |
| farm | 265 | 1b | vessel | 72 | 2a |
| north | 251 | 1a4 | home | 72 | 1a2 |
| mountain | 177 | 1a5 | industry | 71 | 2b |
| manufacture | 165 | 2b | canal | 70 | 3a |
| coast | 162 | 1b | western | 67 | 2a |
| section | 153 | 2b | boat | 67 | 1b |
| land | 152 | 1a2 | capital | 66 | 2b |
| world | 150 | 1a2 | trace | 64 | 2a |
| locate | 149 | 3a | center | 64 | 1b |
| region | 147 | 2a | northern | 63 | 2b |
| route | 146 | 3a | town | 63 | 1a4 |
| product | 146 | 3a | road | 61 | 1a4 |
| west | 137 | 1b | plant | 60 | 1a3 |
| island | 125 | 1b | travel | 59 | 1b |
| ocean | 123 | 1b | level | 58 | 2a |
| railroad | 115 | 2a | trade | 56 | 1b |
| coal | 111 | 1ab | ship | 56 | 1a4 |
| cotton | 111 | 2a | sugar | 55 | 1b |
| map | 110 | 2a | government | 55 | 1b |
| east | 107 | 1a5 | fruit | 55 | 1b |
| soil | 107 | 1b | wind | 55 | 1a4 |
| earth | 102 | 1a5 | clothing | 54 | 1b |
| work | 101 | 1a1 | eastern | 54 | 3a |
| crop | 100 | 2a | rainfall | 53 | 5b |
| distance | 99 | 1b | forest | 53 | 1b |
| climate | 98 | 3a | corn | 52 | 1a5 |
| lake | 97 | 1b | location | 52 | 4b |
| area | 96 | 3a | plain | 52 | 1a5 |
| sea | 95 | 1a3 | zone | 52 | 3a |
| population | 92 | 3a | cattle | 51 | 2a |
| food | 92 | 1a5 | journey | 51 | 1b |
| southern | 91 | 2b | highland | 50 | 4b |
| continent | 90 | 3a | slope | 50 | 2b |
| direction | 81 | 2a | | | |

EXPLANATION: Reading for the first word we have city with a frequency of 466 and Thorndike rating of 1a2 taken from Thorndike's "Teacher's Word Book." In the tabulation singular and plurals were counted together.

TABLE II

SAMPLING OF THE WORDS OF THE FOLLOWING FREQUENCIES

| 49–25 | 24–20 | 19–15 | 14–10 | 9–5 | 4–0 |
|---|---|---|---|---|---|
| rock | mouth | commerce | outlet | bound | mist |
| snow | latitude | oats | buy | flax | resources |
| mine | vapor | flood | tributary | rotation | dunes |
| voyage | mill | basin | torrid | channel | gin |
| tropical | lumber | potatoes | leather | piers | subway |
| supply | scene | peak | sailor | diameter | local |
| rice | oil | range | temperate | sediment | cactus |
| temperature | tourist | moisture | axis | summit | emigrate |
| lowland | hill | system | current | lead | ford |
| settled | export | olive | globe | levee | surf |

The words that occurred the greatest number of times were ranked according to Thorndike. There were 143 of these words with frequencies between 466–24. Following is the result:

50 % were listed in the first thousand.
24 % were listed in the second thousand.
15 % were listed in the third thousand.
3 % were listed in the fourth thousand.
7 % were listed in the fifth thousand.
0 % were listed in the sixth thousand.
.7% were listed in the seventh thousand.
.7% were not listed.

A like comparison was made with the words occurring the least number of times. One hundred seventy-five words were found to have a frequency of one and their ratings from Thorndike's Word Book showed:

2% were listed in the first thousand.
11% were listed in the second thousand.
8% were listed in the third thousand.
10% were listed in the fourth thousand.
10% were listed in the fifth thousand.
8% were listed in the sixth thousand.
7% were listed in the seventh thousand.
5% were listed in the eighth thousand.
5% were listed in the ninth thousand.
34% were not listed.

A correlation was made between the occurrence of the words in the list and their rating as taken from Thorndike. The procedure was as follows. Since there were approximately 1,000 geographical words and Thorndike's list contained 10,000, the first one hundred of the geographical list were paired against the first one thousand in Thorndike's list. Therefore to obtain a perfect correlation those words in the first hundred of the geographical list should fall in Thorndike's first thousand, those in the second hundred should appear in Thorndike's second thousand, etc. In order to save time every tenth word in the geographical list was used in the correlation. The result of the correlation was $r. = .42 \pm .073$.

The following comparisons were drawn from the list of proper nouns. The twelve countries, occurring the greatest number of times, were grouped together. The same thing was also done with the twelve most frequently occurring states, cities, rivers and bodies of water.

| *Countries* | *f.* | *States* | *f.* |
|---|---|---|---|
| United States | 182 | New York | 56 |
| Great Britain | 74 | California | 50 |
| Canada | 59 | Pennsylvania | 46 |

| *Countries (con't.)* | *f.* | *States (con't.)* | *f.* |
|---|---|---|---|
| Russia | 59 | Ohio | 21 |
| China | 50 | Florida | 17 |
| Australia | 45 | Mississippi | 17 |
| Germany | 43 | Virginia | 15 |
| India | 42 | New Jersey | 14 |
| Mexico | 37 | North Carolina | 9 |
| France | 37 | Illinois | 8 |
| Spain | 28 | Oregon | 8 |
| Japan | 27 | Washington | 8 |
| *Cities* | | *Rivers* | |
| New York | 60 | Mississippi | 14 |
| Chicago | 49 | Nile | 11 |
| New Orleans | 38 | Rhine | 11 |
| San Francisco | 33 | Danube | 9 |
| Washington | 23 | Ganges | 8 |
| London | 21 | Hudson | 6 |
| Pittsburgh | 21 | St. Lawrence | 5 |
| Buffalo | 20 | Zambezi | 5 |
| Paris | 20 | Missouri | 4 |
| Moscow | 16 | Ohio | 4 |
| Buenos Aires | 15 | Columbia | 3 |
| Duluth | 14 | Seine | 3 |
| | | *Bodies of Water* | |
| Pacific | 44 | Lake Ontario | 7 |
| Atlantic | 31 | Caspian Sea | 6 |
| Mediterranean | 22 | Great Salt Lake | 6 |
| Black Sea | 9 | Lake Michigan | 5 |
| Lake Superior | 9 | Aral Sea | 4 |
| Lake Erie | 7 | North Sea | 4 |

Mr. Branom in his book entitled "The Teaching of Geography," pp. 276–77, has fifty-two countries ranked in importance in terms of six criteria. The rank attained by the countries in this investigation shown by their frequencies conforms rather closely to the ranking given by Branom. Branom's ranking of the first twelve countries with points scored follows.

| | | |
|---|---|---|
| 1. | United States | 30 points |
| 2. | Great Britain | 28 points |
| 3. | Germany | 28 points |
| 4. | France | 28 points |
| 5. | India | 28 points |
| 6. | Austria Hungary | 27 points |
| 7. | Russia | 27 points |
| 8. | Canada | 27 points |
| 9. | Italy | 27 points |
| 10. | Japan | 26 points |
| 11. | China | 26 points |
| 12. | Brazil | 25 points |

As a summary the following points will be mentioned briefly.

1. Approximately one hundred and seventy hours were spent upon the investigation.

2. No great difference was found between the vocabulary obtained by the study and the normal vocabulary as taken from Thorndike.

3. If the frequency with which a word occurs is an index of its importance then the rank given to the countries by the investigation and by Branom are very much the same.

4. There can be no definite conclusions drawn as to the nature of the vocabulary of our geography texts until a representative number of geographies have been examined.

5. Altho this bit of research was not large enough to warrant any sweeping conclusions it may be taken as a type of study by which the content and vocabulary of all textbooks can be scientifically determined.

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## GEOGRAPHY FOR RURAL SCHOOLS*

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In this discussion we are asked to point out some of the opportunities in rural schools for the effective teaching of geography. The local environment of the school in the open country is widely different from that of the school in a large city. Each, however, has its advantages as well as its disadvantages in the concrete presentation of the subject of geography to boys and girls of the elementary school. The teacher of the rural school and the teacher of the city school each has an ever-present abundance of geographic materials in the local environment with which to make vital connection between the geography of the textbook and the actual busy work-a-day world in which the pupils are living.

### THE POINT OF VIEW

In order to appreciate what geography may offer to the boys and girls of America, it is necessary to keep in mind the progress of modern education in general and the progress in modern school geography in particular. In an effort to have the school contribute more and more fully to the welfare of the individual and to enable him to co-operate in a helpful way with those about him, geography has its contribution to make along with other studies of the curriculum.

* Paper presented at Boston meeting of N. E. A., July 5, 1922.

Geography has always been a study in which man's relation to his natural environment has had a place. At times the study has seemed to deal largely with places without definite effort to associate these places with fundamental relationships existing between the region and the activities of the people living there. At other times the study has seemed to lead to an interesting investigation of the activities of people in various regions of the earth without a keen appreciation of the powerful influences exerted by the natural environment on the activities under consideration. In recent educational progress, students and teachers of geography have turned more and more to the point of view that geography is to interpret to boys and girls the *relationships* existing between the ordinary, everyday work of mankind, and the natural environment in which people live in all parts of the earth.

## HOME RELATIONSHIPS

This relationship may first be brought to the pupil's attention in the study of home geography, for here the human activity and the natural environment are matters of first-hand observation. Under the direction of a skillful teacher of geography, the relationship between these two factors becomes readily apparent, even to pupils of the third and fourth grades. In the study of more distant regions, a concrete, first-hand knowledge of the geographic relationships of the home locality is of great value in gaining an appreciative understanding of other regions. These geographic relationships of the home locality may center in the open country with its wealth of natural environment and its essential connection with the city, in the one case, or, on the other hand, these relationships may center in the city with its wealth of human activities and its vital dependence upon the open country. Frequent and direct comparison of the geographic relationships of the home locality with other regions of our own land and of foreign lands, will aid in developing ideas necessary for intelligent citizenship in America and in the World.

The teacher in the rural school has an exceptional opportunity to develop the study of geography by means of illuminating comparisons with the region best known to the pupils. In order to see the possibilities of the teaching of geography in the rural school, it is desirable that the teacher have clearly in mind the factors of the natural environment which are unquestionably geographic in their bearing, the kinds of human activities which are closely related to man's environment, and the relationship which are strongly geographic in character.

## FACTORS IN THE RELATIONSHIP

The natural environment in which the people of the world are living may be considered under nine catagories: location, climate, surface features, soil, water supply, ocean, minerals, plants, animals. The human activities of the world may be grouped under three categories: economic, social, political. The twelve topics of this enumeration include basic materials for all of the natural sciences and all of the social sciences. These topics may be treated separately and fully without touching the subject of geography. It is the special province of the teacher of geography, however, to select from these two great groups of subjects the large, simple, outstanding facts and show the relationship existing between them. These relationships are ever-present, fully operative, and readily appreciated in the local environment of every rural school. The region in the neighborhood of the rural school thus becomes a laboratory in which to develop definite, concrete geographic concepts, to test by comparison the geographic facts of distant regions, and to make the study of geography reach beyond the covers of a book.

Let us now turn to the opportunity thus offered to the teacher of the rural school and see how the materials at hand may be used. We shall assume that a course of study in geography will follow the same large units of study whether for rural schools or for city schools. We shall assume, also, that the great objectives to be attained in the study of geography are suitable alike for pupils of country and of city. We wish merely to examine how the teacher of the rural school may use effectively the materials at hand in developing the course of study and in attaining the objectives of good geography teaching. For this purpose we shall select from the list of the geographic factors in the natural environment a few topics which may readily find concrete presentation in rural schools.

## THE RELATIONSHIP TO CLIMATE

We shall first consider *climate*. One of the most far-reaching controls of human activity everywhere in the world is that of climate. The *fact* of this control is fully appreciated even without any theoretical knowledge of meteorology. The facts of temperature, moisture, and winds are self-evident. The relationship of man's activities to these climatic controls is concretely illustrated in every locality.

The teacher of the rural school has an opportunity of discussing with the pupils these relationships as they arise. They need to be brought definitely and concretely into consciousness in order to be

appreciated in their local influence and in order to appreciate the climatic controls in lands having a very different climate from that of the region in which the school is located. In times of wet weather when farm operations are delayed or in times of flood when heavy losses occur, the teacher may help the pupils to understand that such conditions occur at many places thruout the world and that people plan great systems of drainage to lessen the destructive effects of too much rain; that bridges must be built high enough and strong enough to withstand the highest flood which may occur. In times of dry weather when crop yields are less than usual, or in case of severe drought, when lack of rainfall results in serious crop losses, the local situation may be discussed and the application made to other regions of the earth. The desirability of a well distributed, moderate rainfall for the home locality gives a basis for concrete thinking about the geographic conditions in extensive areas of the earth.

### THE RELATIONSHIP TO LAND

We may next consider *surface features* of the land. This topic may be dealt with concretely in the immediate locality of every rural school. An examination and a discussion of the actual relief of the land in the school district, and as far beyond as the experiences of the pupils have carried them, is well worth the time and effort required as a means of carrying the subject of "Surface Features" beyond the covers of the textbook. Teacher and pupils may see that in their own locality the land relief requires the expenditure of much money and labor in draining swamps, and that the improved condition of the soil and the large production of crops year after year yield a handsome return for the effort. They may see that the upland ridges have a poorer soil and yield smaller crops than the more nearly level tracts between. They may see that the slope of the land has led the farmers of the locality to use certain portions of their land for crops, other portions for pasture and other portions for woodland. Such concrete observation of local relief and a discussion of the relationship of this local relief to the actual work of the families to which the pupils belong, lays a sure foundation for correct thinking concerning distant regions which can be known only thru pictures and reading.

### PLANT AND ANIMAL RELATIONSHIPS

A definite study of the plant life and animal life of the region about a rural school and their relation to the work of the neighborhood will yield valuable results in the study of geography. A good starting

point in this study is that of the native plant life and the wild animal life of the Indians who occupied the region before the coming of white men. We may then show the advantages of substituting cultivated crops for native forests or open prairie and the advantages of raising domestic animals in an agricultural region. The very existence of mankind is so directly dependent on plants and animals that these factors of the local environment in any agricultural region are now dependent on man's own work.

A study of the kinds of plants and animals in the locality of the school and the reasons for their selection in this region, aids greatly in understanding the local geography. A clear notion of the geographic controls of the plant and animal life of the home locality gives a concrete basis for the study of the plant and animal life of other regions of the world, however different the plants and animals may be from those of the home region. A keen perception of the home situation enables the pupils to see that it is just as natural for the Laplander to raise reindeer as it is for us to have horses and cattle; that it is just as natural for the Chinese to raise rice as their chief bread food as it is for us to raise wheat.

## Relationships Resulting from Location

Another factor of the natural environment of wide application in geography is that of *location*. Pupils may be led to discover that much of the work of the region in which they live is dependent in a very large measure on the location of their home on the surface of the earth. They may be led to see that the location of the home region with reference to the equator determines many things: the length of day and night thruout the year; the sun's path thru the sky; the time of year when each season comes; the differences in the seasons; the kinds of crops that they may raise; the kind of clothing which they wear. They may see that their location with reference to the sea has direct consequences on the industries of the locality. The location of the home region with reference to altitude, with reference to relief features, with reference to transportation lines, cities and markets may be definitely worked out and applied to the ordinary activities of the people of the neighborhood.

## Summary

Let us consider what such a treatment of the geographic materials in the locality of a rural school may accomplish for the boys and girls of American rural schools.

1. It will give them a keen appreciation of the fact that the progress of their own community has been determined in large measure by the use that has been made of the gifts of nature.

2. It will enable them to see that all people everywhere are constantly and necessarily adapting themselves to the rural conditions of the region.

3. It will show them that they would necessarily live very differently if they were in a region with a natural environment strikingly different from their own.

4. It will lead them to see that people everywhere are very much like the people of their locality in the fact that all people are endeavoring to get as good a living as possible from the natural environment in which they live.

5. It will give them a more wholesome attitude toward the peoples of other countries and of other races if the study leads the pupils to see more clearly the common traits and common aspirations of all peoples.

6. In conclusion, it appears that the rural school offers unsurpassed opportunities for teaching geography with a concreteness that will insure to the youth of rural America an elementary mental grasp of world relationships among people and among nations. This concept, thru wide and well directed observation and reading in after years will enlarge into a firm and comprehensive mental grasp of national and world affairs. Thus will geography contribute its share in enabling the boys and girls who are trained in the wholesome environment of the open country to become worthy citizens and capable leaders in the economic, social, and political affairs of their local communities, their state, the nation, and the world.

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## ANNUAL MEETING OF THE NATIONAL COUNCIL OF GEOGRAPHY TEACHERS

The National Council held its annual meeting at the University of Michigan, December 26–27, 1922. The meetings were well attended by representatives from a large number of states, members being present from the distant states of Washington and Massachusetts. The keenest interest and enthusiasm prevailed thruout the three sessions. The meeting was one of the best ever held and was characterized by a growing sentiment that teachers of geography now have an organization in which they can discuss their special problems with profit to themselves and with a prospect of accomplishing an improve-

ment in geographic education. The freedom of discussion of the merits of papers presented was an outstanding and valuable feature of the meeting. There was a striking unanimity of purpose and of the opinion that geography teachers now constitute a firmly united group in which the members can be mutually helpful. It is now evident that no geography teacher who expects to be more than a mere follower can afford to remain away from the annual meeting.

The program as published in the *Journal of Geography* for December, 1922 was carried out in detail. Insufficient time prevented adequate discussion of the preliminary reports presented. It is probable that the final reports of the special committees will be presented next year.

The annual meeting of the Board of Directors and Executive Committee was held at the Michigan Union, December 27 and the following business was transacted.

1. Upon motion of the nominating committee the following officers were elected.

*President,* R. M. Brown, Rhode Island College of Education, Providence

*Vice-president,* E. E. Lackey, State Normal School, Wayne, Nebraska

*Vice-president,* Erna Grassmuck, State Department of Public Instruction, Harrisburg, Pennsylvania

*Secretary,* George J. Miller, State Teachers College, Mankato, Minnesota

*Treasurer,* D. C. Ridgley, Clark University, Worcester, Massachusetts

*Members of Executive Committee,* terms to expire, December, 1925: Bessie P. Knight, South High School, Minneapolis, Minnesota; W. W. Atwood, President Clark University, Worcester, Massachusetts; A. E. Parkins, George Peabody College for Teachers, Nashville, Tennessee

*Directors at Large:* Myrta McClellan, University of California, Los Angeles; L. F. Thomas, Washington University, St. Louis; Rachel E. Day, Waialua, Hawaii; W. R. McConnell, Miami University Oxford, Ohio; R. S. Holway, University of California, Berkeley; Ellen C. Semple, Louisville, Kentucky; J. E. Switzer, State Normal School, Valley City, North Dakota

2. It was voted to affiliate the National Council of Geography Teachers with the National Council for Social Studies provided certain proposed changes in the constitution of the latter organization are made.

3. Miss Edith P. Parker was elected to represent the National Council of Geography Teachers on the controlling body of the National Council for the Social Studies.

4. Dr. A. E. Parkins was instructed to continue the magazine service established in 1920.

5. The committees on elementary and high school geography, and on normal school geography were continued.

6. Mr. D. C. Ridgley was appointed chairman of a committee to prepare and execute a plan for extending the membership of the National Council.

7. It was voted to hold the next annual meeting in Cincinnati, Ohio.

GEORGE J. MILLER,
*Secretary*

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## COOPERATION IN GEOGRAPHY TEACHING*

WILLIAM H. EMMONS
Deering High School, Portland, Maine

One of the problems that confront the geography teacher is the effort to bridge successfully the gulf existing between the work of the grammar school and that of the high school. One aim in modern teaching has been to minimize the difference in methods between grammar and high schools and to make the work of both one continuous and uninterrupted progression. Possibly in no work is this more needed than in geography.

If work in English, in mathematics or in any language, for instance, were continued vigorously for three years in the grades, then discontinued at the end of the seventh grade to be taken up again in the second or third or fourth year of high school after a lapse of two, three, or four years in which the subject received no attention whatever, the difficulties of continuing the work so long omitted would be considered difficult. Yet that is the situation in geography.

The student feels on entering the eighth grade that he has passed beyond so elementary a subject as geography and this feeling is increased on entering high school. Strange as it may seem, many teachers and principals hold somewhat the same view, so that geography in high school is often regarded as of relatively little importance and is consequently relegated to the rôle of program-filler to any teacher whose work will admit it.

* Presented at the first meeting of the State Council of Maine, October 28, 1922.

On the whole, much encouragement is felt over the increasing number of high school geography teachers who are receiving special training for this work. Nevertheless many problems confront the teacher of geography, among which is that of tying up the work of high school geography with that of the grades. Its solution seems to appear in a closer relationship, a better understanding and more hearty cooperation between teachers of geography in the grades and those in high schools. If the State Council can in some measure secure this work it will have raised the standards of geography in Maine to a marked degree.

I should like to see in each community that supports a high school, in this state, a local council composed of all teachers of geography in that section, each local council to have its chairman whose duty it would be to call not less than one meeting a year of the council members for the purpose of discussing problems, submitting methods and outlining work to be covered so as to conserve time and needless effort in teaching geography. Each local chairman could then report in writing the important findings of such meetings to the director of the State Council, such findings to be submitted for discussion and mutual benefit at the next meeting of the state organization. I should like to see the State Council appoint a committee of five who should meet at some time before the close of the school year and arrange a syllabus for geography thru the grades and high school, such syllabus to be submitted for criticism and possible adoption at the next regular meeting of the State Council. Its adoption would undoubtedly assure its approval by the school committees of the various cities and towns thruout the state.

Some such course as that which I have outlined, would, I believe, be a step forward in geography teaching and help to make the Council of Geography Teachers a vital force in our state education. It would give us a better understanding of each others' problems and methods, would place at the disposal of the inexperienced teacher the help of those who are better trained and would secure at least something of cooperation in geography teaching.

## GEOGRAPHICAL NOTES AND NEWS

A Maryland State Council will soon be organized under the direction of Professor E. Curt Walther of the Towson State Normal School. The preliminary plans for the organization were worked out at a luncheon held at the Towson Normal School.

The Illinois State Council has resumed publication of its *Bulletin* under the direction of Professor Robert G. Buzzard, State Normal University, Normal, Illinois. Each issue of

the *Bulletin* contains highly practical suggestions to the teacher in active service. It is sent out in mimeograph form at present. It should prove very suggestive to other state leaders.

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The Missouri Council of Geography Teachers met in Kansas City November 16, 1922. Professor Sam T. Bratton of Missouri University presided. Announcement had been made that instead of a program of formal papers there would be a conference regarding the advisability of undertaking the task of geography curriculum construction. All speakers agreed that the task is an urgent one in Missouri because the geography work outlined in the State Course of Study, which is used thruout the rural and village schools is inadequate to meet the needs of today. A committee was appointed to inaugurate this work.

Miss Moina Prator of the Southwest Missouri State Teachers College at Springfield was elected chairman for the ensuing year, and Professor Bratton was chosen secretary.

MOINA PRATOR, *Secretary*

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Dr. Warren D. Smith who returned recently from the Philippines has injected new life into the Oregon State Council of Geography Teachers. An excellent program was presented at the December meeting which was one of the largest and most enthusiastic meetings held in connection with the State Teachers Association. Dr. Smith is to be congratulated upon his solution of a number of perplexing problems of organization in Oregon. His work in geography at the State University is now developing rapidly. The State Council adopted the following resolution.

"The Oregon Council of Geography Teachers, realizing the inadequate attention now given to the various branches of geography in this state, and the greater need for sound instruction in these as a preparation for our part in the commercial, political and social activities in the world's work, hereby recommend as a first step toward the rehabilitation of this subject in our curriculum, the introduction of a one year course in general geography in the high schools of the state, preferably in the Junior year."

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An "Indiana State Geography Conference" was held January 26 and 27, under the auspices of The Ball Teachers College, at Muncie. Its purpose was to establish cooperation between superintendents and those who prepare teachers, in their common endeavor to secure more effective geography teaching. The chairman was Superintendent Lee O. Baird. The meeting was addressed by other school superintendents, the President of the Teachers College, a representative of the State Department of Education, Professors Fred J. Breeze and Bernard H. Shockel, and Dr. Henry C. Cowles of the University of Chicago. An "Indoor Camp Supper," served by the Geography Club, was one of the special features of the gathering. The success of this highly constructive meeting is due to the effective work of Professor Breeze of Muncie. It is a plan worthy of emulation by other leaders.

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Dr. Albert P. Brigham of Colgate University and Dr. J. Paul Goode of the University of Chicago were among our distinguished members who spent a part of the past year in Europe. Dr. Brigham gave a course of lectures on America before the Oxford University School of Geography August 10 to 16. The subjects were: The American Domain; The Distribution and Racial Character of the Population; American Education; American Social and Political Ideals. The intelligent reporting of Dr. Brigham's addresses in the London papers might well be emulated by American papers under similar circumstances.

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Professor R. H. Whitbeck was the principal speaker at state council meetings in Ohio and Minnesota during October.

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The Institute of International Education, 419 West 117th Street, New York announces three "Students' Tours" to Europe for the summer of 1923. One is to Italy, another to France and a third, for art students, to various points on the continent.

Do you receive the *Geographic News Bulletin* issued by the National Geographic Society? It is sent to teachers at the cost of mailing, viz. twenty-five cents a year. As this service is provided to teachers without profit your cooperation is desired by the Society in keeping the mailing list up to date. Back numbers cannot be furnished.

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To reach the layman and make it possible for him to better appreciate the country over which he travels a course on "Map Reading and Interpretation" has been prepared by the Extension Division of the University of California, Berkeley.

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## GEOGRAPHICAL PUBLICATIONS

Douglas C. Ridgley and others. **Five-year Course of Study in Geography; Home Geography; Studies in World Geography; Studies in the Geography of North America; Studies in the Geography of South America, Europe, and Asia; Studies in Africa, Australia and World Geography.** McKnight & McKnight, Normal, Ill. 40 to 60 cents each.

The first is a five-year course in geography prepared by Professor Ridgley and several of the Training School Teachers of the State Normal University at Normal, Illinois. The series of books follow closely the prescribed course of study as outlined for the common schools of Illinois. Each book is planned to cover a year of work. Each has the work outlined by quarters and half-quarters which means really that the material is outlined by months. These reference notebooks may be used with any standard textbook, altho there is some reading matter in each of them. The books are provided with broken sentences to be filled in, with many outline maps to be colored, and many blank pages for compositions, answers to questions, and the assembling of illustrative pictures. One of the features of the series is the emphasis placed on locative geography.

The second book is entitled "Home Geography" and is meant for the fourth year. It is pure home geography and does not extend beyond the home environment except for a study of the state government and a few astronomical studies. The third book is called "World Geography" and is designed for the fifth year. It covers the world thru a study of industries, chiefly agricultural, in the different heat belts. The fourth book covers a study of "North America" for the sixth year, putting in about one-half of the time on the United States. For purposes of study the author used the political rather than any system of natural units. The fifth book presents "South America, Europe, and Asia" for the seventh year. The sixth book is entitled "Africa, Australia, and World Geography." It is written for the eighth year, the first quarter devoted to the principles of world geography, the second quarter to Africa and Australia, the third quarter to a review of "World Geography by Means of a Trip Around the World on the Fortieth Parallel," and the fourth quarter to the ' Industrial and Commercial Development of the United States."

The author makes no attempt or claims for problem organization. In some places the continuous flow of thought in the narrative is broken up by interposed questions. Some may question the advisability of introducing astronomical studies in home geography. According to Ferrel's Law, the diagrams of the wind belts should show the southwest monsoons for July and the northwest monsoons for January. The fact that each child must own his book will be a severe handicap to the use of the series in states having free textbooks.

E. E. LACKEY

*State Normal School,*
*Wayne, Nebr.*

**The Economic Resources of Italy.** Vol. I, 238 pages of text, 102 diagrams, 39 photos. Vol. II, 243 photos. Pub. by "Credito Italiano," Milan, Italy. 1920.

The Credito Italiano is the oldest of the four credit banks of Italy which were founded

with the principal object of "directing, supporting and developing the financial and economic resources of the country." In furtherance of this purpose, it published, in 1920, two artistic volumes entitled "The Economic Resources of Italy." In Part I of Volume I are made brief statistical statements regarding Italian population, labor, agrarian production, stock breeding, industrial power, mines, railways, ports, foreign trade, mercantile marine, naval construction, the economic value of Italian colonies, international payments, rates of exchange, insurance, and the national budget. The usefulness of the grafs accompanying the statements is impaired considerably by the elaborateness of the symbols employed in their design. The chief value of the volumes lies in the excellent pictures they contain. Part II of Volume I consists wholly of panoramic views of the more important Italian towns, and Volume II is a collection of Italian industrial scenes. Naturally, in view of the character of the publication, the pictures are chosen to show the best conditions that obtain rather than representative ones. Nevertheless they are valuable illustrative material for use in studying the geography of Italy. EDITH P. PARKER

*University of Chicago*

O. J. R. Howarth. **The World About Us.** Subtitle: A Study in Geographical Environment. 92 pp., 8 maps. Oxford University Press, American Branch. 1922. $1.00.

"Man may profitably be studied in his environment" is the thought the author of this book suggests to his readers. He shows how geographic environments affect "man's movement and settlement, his social, political, and economic status, his mind and his body."

After enumerating the leading types of physical features and considering certain points in relation to their influence upon man, a rapid view of the major regional divisions of the world is given. Here the author compares and contrasts five world maps which show; (1) Occupations of Man, (2) Distribution of Man, (3) Distribution of Vegetation, (4) Relief Features, and (5) Distribution of Rainfall with January and July isothermal lines.

Two chapters are devoted to the subject of "Migration" and "Transportation." The development of the early sea traffic from the Eastern Mediterranean to the whole of that sea and from it to the Atlantic Ocean is traced briefly. The author shows that railroad building and even airplane flying is dependent on many geographic conditions.

The chapter entitled "Geographic Environment and Political States" is especially interesting. Here two factors are considered; first, whether the general physical features of a territory make it suitable for a seat of an independent state, and second, the geographic problems associated with frontiers. Europe is used as an example. This topic is of sufficient complication and importance to be made a subject of a book rather than a chapter and one cannot but regret its brief discussion in this book.

The concluding chapters "Local Application of Environmental Study" and "Environment and History" contain a brief survey of the southwestern part of the Isle of Wight. It was written with the purpose of suggesting possible lines of interest to readers in their own, or any other, locality.

No doubt this book will be welcomed by geographers and will be used as a supplementary text by high school and normal school students. M. PUDER

*State Teachers College,*
*Mankato, Minn.*

R. M. Fleming. **Ancient Tales From Many Lands.** With an introduction by H. J. Fleure. 193 pp., 9 half-tone plates. Frederick A. Stokes, New York. 1922.

This interesting volume is a collection of thirty-three folk tales from China, West Africa, Britain, Ireland, Japan, Polynesia, Babylonia, Assyria, New Zealand, India, Iceland, Egypt, America, Greece, and other parts of the world, with chapters on their historical and

geographical background, and a bibliography. The tales as here presented are the substance of a series of lectures to the Geographical and Ethnographical Sections of the British Association in 1921. Miss Fleming's ability as a story-teller, her love of folk-tales and her skill as a teacher are reflected in the entertaining style in which the book is written. It will appeal to the story-lover, the student, and the teacher of history and geography.

A. K. Lobeck. **Physiographic Diagram of Europe.** Wisconsin Geographical Press, Madison, Wis. Price varies with number purchased. 1923.

This diagram is similar to the small scale "Physiographic Diagram of the United States" prepared by Professor Lobeck last year and is arranged in the same style and is on the same scale. A text of some 20,000 words accompanies the diagram and is so arranged that the student, while reading it, must letter given localities on the map. Answers to the various questions raised are provided for the teacher. The diagram brings out the physiographic features of Europe in a very effective manner.

J. F. Unstead. **The British Isles of To-day.** 184 pp., 16 maps and diagrams. Sidgwick and Jackson, Limited, London, 1922. 3s.

"The British Isles of To-day" is the first of four volumes which make up the "Citizen of the World" Geographies. The book was written with the aim of giving a descriptive and interesting account of the British Isles and their peoples, and at the same time treat the subject scientifically by endeavoring to explain the relations between the various facts.

The author explains that the book is written for the upper classes of elementary schools as a textbook. In America, however, I believe its proper use would be as a reference book.

The first Chapter "Britain in the Making" is a clear, interesting, and concise account of how Britain was formed. It traces the changes in the country from the Ice Age thru the Teutonic invasions to the Modern Isles. The population and climate of Britain are then discussed, and are followed by a detailed treatment of the natural regions of Britain. England, Wales, Scotland, and Ireland are each divided into natural regions, and the natural features and the life of the inhabitants are studied.

This type of book is to be welcomed into our elementary schools. It is recommended for its simple style, and also for its mass of interesting material.

E. MARIE PUDER

*State Teachers College,*
*Mankato, Minn.*

Philip Emerson. **The Geography of New England.** 96 pp., 114 maps and photos. Macmillan Co., New York. 1922.

This is the second of the Macmillan series of state or sectional texts that have come to the attention of the writer. The publishers are to be congratulated on the fairly independent form in which these books are appearing. This makes each book stand on its merits and hence not entirely a "second thought" in connection with a series of books that it is to supplement. However, a "Table of Contents" would add materially to its value. The absence of maps showing any of the elements of climate, or the distribution of any of the natural resources, and of any diagrams showing relative production of natural products, amount of commerce, manufactures, etc., is difficult to justify. A number of the photographs might better have given place to material that showed factors influencing the activities of the people and the adjustment of the people to their natural environment. Many of the illustrations have little or no geographic significance.

Zoe A. Thralls. **The Geography of Pennsylvania.** 110 pp. 114 maps, diagrams and photos. Macmillan Co., N. Y. 1922.